

ABSTRACT OF THE DISCLOSURE

A device for transmitting motion between the rotor of a synchronous permanent-magnet motor and the working part, having an increased free rotation angle, which comprises at least two motion transmission couplings
5 which mutually cooperate in a kinematic series. Each coupling is constituted by at least one driving element which is eccentric with respect to the rotation axis and is rigidly coupled to a first component of the motion transmission system and by at least one driven element, which is also eccentric with respect to the rotation axis and is rigidly coupled to the component arranged
10 kinematically after the preceding one. The angle covered by the elements of each coupling is, as a whole, less than a round angle. The intermediate components of the kinematic transmission have both a driven element and a driving element for receiving the motion from the preceding one and transmitting it to a subsequent one.

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H02K 7/118, F16D 3/02, F04D 13/02		A1	(11) International Publication Number: WO 99/48189
			(43) International Publication Date: 23 September 1999 (23.09.99)
(21) International Application Number: PCT/EP99/01715 (22) International Filing Date: 16 March 1999 (16.03.99) (30) Priority Data: PD98A000058 19 March 1998 (19.03.98) IT (71) Applicant (for all designated States except US): ASKOLL HOLDING S.R.L. [IT/IT]; Via Industria, 30, I-36031 Dueville (IT). (72) Inventor; and (75) Inventor/Applicant (for US only): MARIONI, Elio [IT/IT]; Via Molino, 6, I-36031 Dueville (IT). (74) Agent: MODIANO, Guido; Modiano & Associati, Via Meravigli, 16, I-20123 Milano (IT).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	

(54) Title: DEVICE FOR TRANSMITTING MOTION BETWEEN THE ROTOR OF A SYNCHRONOUS PERMANENT-MAGNET MOTOR AND THE WORKING PART, HAVING AN INCREASED FREE ROTATION ANGLE

(57) Abstract

A device for transmitting motion between the rotor of a synchronous permanent-magnet motor and the working part, having an increased free rotation angle, which comprises at least two motion transmission couplings which mutually cooperate in a kinematic series. Each coupling is constituted by at least one driving element (37) which is eccentric with respect to the rotation axis and is rigidly coupled to a first component (14) of the motion transmission system and by at least one driven element (39, 41), which is also eccentric with respect to the rotation axis and is rigidly coupled to the component (32) arranged kinematically after the preceding one. The angle covered by the elements of each coupling is, as a whole, less than a round angle. The intermediate components of the kinematic transmission have both a driven element (39, 41) and a driving element (37) for receiving the motion from the preceding one and transmitting it to a subsequent one.

